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| APPLICATION NO.                      | F                          | ILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|--------------------------------------|----------------------------|------------|----------------------|-------------------------|------------------|--|
| 10/038,639                           |                            | 01/04/2002 | Ronald J. Scherer    | 3616.213US01            | 9187             |  |
| 23552                                | 7590                       | 05/14/2004 |                      | EXAMINER                |                  |  |
| MERCHANT & GOULD PC<br>P.O. BOX 2903 |                            |            |                      | HECKENBERG JR, DONALD H |                  |  |
|                                      | MINNEAPOLIS, MN 55402-0903 |            |                      | ART UNIT                | PAPER NUMBER     |  |
|                                      |                            |            |                      | 1722                    |                  |  |

DATE MAILED: 05/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |  |  | <i>r</i> |
|--|--|--|----------|
|  | Application No.  | Applicant(s)   |          |
|  | 10/038,639   | SCHERER ET AL.   |          |
| Office Action Summary  | Examiner   | Art Unit   |          |
|  | Donald Heckenberg  | 1722   |          |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the o   | correspondence address   |          |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).   | 36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | mely filed  ys will be considered timely. In the mailing date of this communicati  ED (35 U.S.C. § 133). | ion.     |
| Status   |  |  |          |
| <ul> <li>1) Responsive to communication(s) filed on 09 Fe</li> <li>2a) This action is FINAL. 2b) This</li> <li>3) Since this application is in condition for allower closed in accordance with the practice under E</li> </ul>   | action is non-final.<br>nce except for formal matters, pro   |  | is       |
| Disposition of Claims  |  |  |          |
| 4) ⊠ Claim(s) <u>24-44</u> is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>24-28,35-41,43 and 44</u> is/are rejected 7) ⊠ Claim(s) <u>29-34 and 42</u> is/are objected to. 8) □ Claim(s) are subject to restriction and/or  | vn from consideration.   |  |          |
| Application Papers   | •  | •  |          |
| 9)☐ The specification is objected to by the Examine 10)☒ The drawing(s) filed on 04 January 2002 is/are:  Applicant may not request that any objection to the orection Replacement drawing sheet(s) including the correction of the orection | a)⊠ accepted or b)⊡ objected drawing(s) be held in abeyance. Se ion is required if the drawing(s) is ob  | e 37 CFR 1.85(a).<br>njected to. See 37 CFR 1.121  | (d).     |
| Priority under 35 U.S.C. § 119   |  |  |          |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of   | s have been received.<br>s have been received in Applicat<br>ity documents have been receive<br>(PCT Rule 17.2(a)).  | ion No<br>ed in this National Stage  |          |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date  | 4)  Interview Summary Paper No(s)/Mail D 5)  Notice of Informal F 6)  Other:   | r (PTO-413)<br>ate<br>Patent Application (PTO-152)   |          |

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 2. Claims 24, 28, and 35 are rejected under 35 U.S.C. 102(a) as being anticipated by German Pub. No. 100 02 390 (previously of record; hereinafter "DE '390"; reference below will be made to the drawings of this document as well as the English translation previously made of record).

DE '390 discloses a mold for manufacturing a concrete block. As shown in figure 3, the mold comprises a plurality of side walls (49) defining a mold cavity (46) having an open mold top and open mold bottom. A first of the sidewalls (the one on the right side of fig. 3) includes an undercut (55 and 56) adjacent to the open mold bottom. A pallet (50) is provided that closes the entire bottom of the mold cavity. The undercut, along with a flat surface of the pallet, defines a flangeforming subcavity of the mold cavity which is configured to form a flange (43) on the molded block (see fig. 3). The remainder of the sidewall that comprises the undercut is substantially planar and extends substantially vertically (see fig. 3).

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DE '390 further discloses the mold assembly to be such that a plurality of mold cavities operate with the single pallet to mold a plurality of blocks at the same time (see p. 7, 11. 3-10 of translation describing a series of mold cavities).

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. The factual inquiries set forth in Graham v. John Deere

  Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for

  establishing a background for determining obviousness under 35

  U.S.C. 103(a) are summarized as follows:
  - Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE '390 in view of Hedrick (U.S. Pat. No. 5,183,616; previously of record).

DE '390 discloses the mold assembly as described above. DE '390 further discloses the mold to comprise a stripper shoe (57) for introduction into the mold cavity through the open top of the mold cavity to press the face of the stripper shoe on the block molded in the cavity. The stripper shoe includes a flange (58) surrounding the perimeter the face, the flange being arcuate so as to produce rounded edges on the front face of the block (see fig. 3).

DE '390 does not disclose the face of the stripper shoe to comprise a three-dimensional pattern to be imparted to the molded block.

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Hedrick discloses a mold assembly for making concrete products. The assembly comprises a stripper shoe (74) which is introduced into the top of the mold cavities (see fig. 2). The stripper shoe includes three-dimensional patterns (90 and 90a) so that the pattern is imparted on the molded block (cl. 5, 11. 43-56).

It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to have modified the mold assembly of DE '390 as such to have made the stripper shoe comprise a three-dimensional pattern because this would allow for the pattern to be imparted on the molded product as suggested by Hedrick.

Claim 26 recites the actual patterns to be imparted to the brick, specifically one that simulates natural stone. Hedrick notes that it is desirable to make custom bricks with different distinctive patterns (cl. 2, 11. 3-7 & 11. 30-34). Accordingly, it would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to have modified the apparatus of DE '390 as such to have the stripping shoe as such to have distinctive patterns, such as natural stone, because this would allow for the corresponding distinctive patterns to be imparted to the molded product as desired as suggested by Hedrick.

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7. Claims 36-41 and 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 196 34 499 (previously of record; hereinafter "DE '499"; reference below will be made to the drawings of this document as well as the English translation previously made of record) in view of Hendrick.

DE '499 discloses a mold assembly comprising a plurality of side walls (3 and 4) defining a mold cavity (5) with an open top and bottom. The flat surface of a pallet (1) closes the entire bottom of the mold cavity (see figs. 1 and 15). The side walls include a converging portion (4) which is movably mounted so that it is movable between a position at an angle with respect to the vertical so that the mold cavity is wider at its top than it is at its bottom, to a position in which the bottom of the mold cavity is wider at the top of the mold cavity (as shown in fig.15). The converging portion (4) defines a substantially vertical, planar surface facing the mold cavity and an undercut adjacent to the bottom of the mold, (see fig. 15). DE '499 also discloses the assembly to comprise a mechanism (15) for biasing each of the converging side wall portions to the angled position.

DE '499 further discloses the mold assembly to be provided with a stripper shoe (6) for introduction into the mold cavity

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through the open top of the mold cavity to press the concrete contained in the mold cavity (see fig. 15).

DE '499 does not disclose the stripper shoe to comprise a three-dimensional pattern, such as simulating natural stone or a flange, to thereby impart the pattern on the molded concrete product.

Hedrick discloses a mold assembly for making concrete products. The assembly comprises a stripper shoe (74) which is introduced into the top of the mold cavities (see fig. 2). The stripper shoe includes three-dimensional patterns (90 and 90a) so that the pattern is imparted on the molded concrete (cl. 5, 11. 43-56).

It would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to have modified the mold assembly of DE '499 as such to have made the stripper shoe comprise a three-dimensional pattern because this would allow for the pattern to be imparted on the molded product as suggested by Hedrick.

Claims 37-38 recite specific patterns to be imparted to the brick. Hedrick notes that it is desirable to make custom bricks with different distinctive patterns (cl. 2, 11. 3-7 & 11. 30-34). Accordingly, it would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to have

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modified the apparatus of DE '499 as such to have the stripping shoe comprise distinctive patterns, such as natural stone or flanges at the perimeter, because this would allow for the corresponding distinctive patterns to be imparted to the molded product as desired as suggested by Hedrick.

DE '499 also does not disclose the converging wall portions to extend the entire distance across the mold cavity between the opposed side wall portions. However, DE '499 notes that the converging portion is designed to form an undercut portion in the block molded in the assembly, and notes the shape of the converging portion in turn forms the shape of the undercut in the block (see for example, translation p. 9, ll. 13-14 noting that the converging portion 4 forms a triangular undercut). DE '499 is thus clearly relating the converging portion to the ultimate shape produced in the block. Therefore, it would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to have modified the assembly disclosed in DE '499 as such to have the converging portion extended across the entire mold cavity to the opposing side walls because this in turn would have created an undercut extending fully across the block (as desired to form certain shaped blocks) given the correlation of side portion to block shape in DE '499.

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- 8. Applicant's arguments with respect to claims 24 and 36 have been considered but are moot in view of the new grounds of rejection described above.
- 9. Claims 29-34 and 42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 10. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to teach or suggest a mold assembly of for forming a pre-cured dry cast concrete block as defined in claim 29. The closest prior art is disclosed by DE '390. DE '390 discloses the apparatus as described above. DE '390 fails to teach or suggest the mold assembly to comprise a converging side wall portion extending across the entire distance of the mold cavity between two opposed side walls that are adjacent to a second side wall as defined in claim 29. As noted above, DE '499 discloses a converging side wall portion. However, there is no suggestion of how the converging wall portion of DE '499 could be integrated into the assembly of DE '390 given configuration of DE '390 with a projection (52) on

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one side of the cavity and a flange forming region (55 and 56) on the other side of the cavity (see fig. 3). Instead it appears that such a modification to DE '390 would be either redundant, or at least render inoperative the undercut forming structures discloses in DE '390.

See also the reasons for indicating allowable subject matter in the previous Office Action.

11. Applicants' amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, <u>THIS ACTION IS MADE FINAL</u>. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated

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from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Heckenberg whose telephone number is (571) 272-1131. The examiner can normally be reached on Monday through Friday from 9:30 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker, can be reached at (571) 272-1151. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions

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on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

Donald Heckenberg

May 11, 2004

JAMES P. MACKEY PRIMARY EXAMINER

5/12/04